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U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form JP920000280US1

Application No. 09/732,250 First Named Applicant: Vamsi Krishna Sangavarapu
Examiner: Insun Kang Art Unit: 2124 Status of Application: Final rejection

Tentative Participants:

(1) Anthony V.S. England (2) Insun Kang

(3) _____ (4) _____

Proposed Date of Interview: 4/16/04 Proposed Time: 11:00 (AM/PM) Eastern

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES

☒ NO

If yes, provide brief description: _____

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APR 08 2004

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Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rej.</u>	<u>1-18</u>	<u>Alverson</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☒ Continuation Sheet Attached

Brief Description of Arguments to be Presented:

see attached

An interview was conducted on the above-identified application on _____.

NOTE:

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Anthony V.S. England

(Applicant/Applicant's Representative Signature)

(Examiner/SPB Signature)

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Interview Request
April 08, 2004

09/732,250
Filed: December 7, 2000

Applicant's remarks in the Reply to first Office action focused on Alverson's teachings about what Alverson calls "out-of-line" processing of breakpoints by instruction emulation, because it seems to Applicant that this teaching is propounded as new.

The last Office action, finally rejecting all claims, relies on Alverson, col. 17, lines 20-40, for teaching about in-line processing of breakpoints. This passage of Alverson, and particularly Alverson col. 17, lines 24-30, teaches that if the out-of-line instruction emulation techniques taught by the Alverson invention cannot be practiced because some permission does not exist to permit emulation of an instruction, then breakpoints must be handled in-line, i.e., without the use of out-of-line instructions and emulation. The choices Alverson teaches for in-line handling of breakpoints are either a) threads have to be halted or b) it must just be accepted that some thread might miss a breakpoint.

Alverson's choice b), missing a breakpoint, is nothing more than a reference to the same zombie breakpoint problem addressed by the present invention. Alverson offers no solution in connection with choice b). This teaching does not anticipate the present claimed invention because the claims state that if a breakpoint does not exist, i.e., a breakpoint has been temporarily removed so that the instruction replaced by the breakpoint can be executed, then the breakpoint is identified. See, e.g., claim 1 (last step). Since the breakpoint is identified it is decidedly *not* missed, as in Alverson's choice b).

Regarding choice a), Alverson does not explicitly state the significance of choosing to halt threads. However, Applicant's understanding of the implication of halting threads is as follows. When one thread triggers a breakpoint and the breakpoint is temporarily removed the other threads may be halted *until the breakpoint is replaced*. Then multithreaded processing may resume. If the other threads were permitted to execute while the breakpoint was temporarily removed, the other threads might encounter the temporarily replaced instruction and thereby miss the temporarily absent breakpoint.

From the above it should be appreciated that according to Alverson's choice a) threads other than a thread that triggers a breakpoint might fail to identify a temporarily absent breakpoint unless the other threads are halted. With this perspective it should be understood that this teaching about choice a) by Alverson does not anticipate the claimed invention for the same reasons that Alverson's teaching about choice b) does not anticipate the claimed invention. That is, neither of the choices offered by Alverson for in-line handling of breakpoints teach that an absent breakpoint is *identified* as a zombie breakpoint, as claimed in the present application.